B. Amendments to the Claims:

Claims 1-36 have been cancelled, and Claims 37-59 have been added as follows:

37. (New). A method of inhibiting a T-cell response to an antigen, comprising;

culturing mesenchymal stem cells in the presence of IFN-γ;

modifying said mesenchymal stem cells to present said antigen by contacting said mesenchymal stem cells with said antigen in vitro, wherein said mesenchymal stem cells do not produce co-stimulatory molecules in a sufficient amount to activate T-cells, whereby said mesenchymal stem cells process said antigen into an antigen fragment for presentation by said mesenchymal stem cells; and

administering to a host said modified mesenchymal stem cells, thereby inhibiting a T-cell response to said antigen upon subsequent exposure of the T-cells to antigen presenting cells which express co-stimulatory molecules.

38. (New). The method of Claim 37 wherein said mesenchymal stem cells do not produce co-stimulatory molecules.

39. (New). The method of Claim 37 wherein said mesenchymal stem cells are genetically engineered to express a molecule to block co-stimulation of T-cells.

40. (New). The method of Claim 39 wherein the molecule is membrane-bound.

41. (New). The method of Claim 40 wherein the molecule is CTLA-4.

42. (New). The method of Claim 39 wherein the molecule is a soluble protein.

43. (New). The method of Claim 42 wherein the molecule is CTLA-4-Ig fusion protein.

44. (New). A method of inhibiting a T-cell response to an antigen, comprising:

culturing said mesenchymal stem cells in the presence of IFN-γ;

modifying human mesenchymal stem cells to present said antigen by genetically engineering said human mesenchymal stem cells to express said antigen, wherein said human

mesenchymal stem cells do not produce co-stimulatory molecules in a sufficient amount to activate T-cells, whereby said human mesenchymal stem cells process said antigen into an antigen fragment for presentation by said human mesenchymal stem cells; and

administering to a host said modified human mesenchymal stem cells, thereby inhibiting a T-cell response to said antigen upon subsequent exposure of the T-cells to antigen presenting cells which express co-stimulatory molecules.

45. (New). The method of Claim 44 wherein the antigen is an autoantigen.

46. (New). The method of Claim 44 wherein the human mesenchymal stem cells are autotogous to the host.

47. (New). The method of Claim 44 wherein said mesenchymal stem cells do not produce co-stimulatory molecules.

48. (New). The method of Claim 44 wherein said mesenchymal stem cells are genetically engineered to express a molecule to block co-stimulation of T-cells.

49. (New). The method of Claim 48 wherein the molecule is membrane-bound.

50. (New). The method of Claim 49 wherein the molecule is CTLA-4.

51. (New). The method of Claim 48 wherein the molecule is a soluble protein.

52. (New). The method of Claim 51 wherein the molecule is CTLA-4-Ig fusion protein.

53. (New). A method of inducing T-cell tolerance, comprising:

culturing mesenchymal stem cells in the presence of IFN-γ;

modifying said mesenchymal stem cells to present said antigen by contacting said mesenchymal stem cells with said antigen in vitro, wherein said mesenchymal stem cells do not produce co-stimulatory molecules in a sufficient amount to activate T-cells, whereby said mesenchymal stem cells process said antigen into an antigen fragment for presentation by said mesenchymal stem cells; and

administering to a host said modified mesenchymal stem cells, thereby inducing T-cell tolerance to said antigen upon subsequent exposure of the T-cells to antigen presenting cells which express co-stimulatory molecules.

54. (New). The method of Claim 53 wherein said mesenchymal stem cells do not produce co-stimulatory molecules.

55. (New). The method of Claim 53 wherein said mesenchymal stem cells are genetically engineered to express a molecule to block co-stimulation of T-cells.

56. (New). The method of Claim 55 wherein the molecule is membrane-bound.

57. (New). The method of Claim 56 wherein the molecule is CTLA-4.

58. (New). The method of Claim 55 wherein the molecule is a soluble protein.

59. (New). The method of Claim 58 wherein the molecule is CTLA-4-Ig fusion protein.